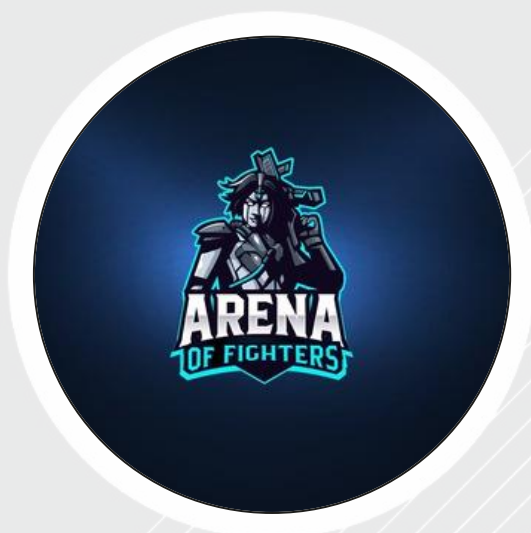




SPYWOLF

Security Audit Report



Completed on
January 3, 2022

@SPYWOLFNETWORK



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SPYWOLF.CO





OVERVIEW

This audit has been prepared for **Arena of Fighters** to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

- SPYWOLF Team -

”





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ARENA OF FIGHTERS



PROJECT DESCRIPTION

According to their whitepaper:

Arena of fighters will be a multiplayer TPS game of CGU mode that consists of elements like MOBA, RPG, Roguelike and Social, A competitive Web3 Battle ground, Play for Fun and Earn for real, ARENA ensure that the earning is easier through different gaming channels.

Release Date: Presale starts in January, 2023

Category: Play to earn (P2E)



CONTRACT INFO

Token Name

ARENA OF FIGHTERS TOKEN

Symbol

ARENA

Contract Address

0xD093001C342Dfac55490c66901c3697237A769Bd

Network

Binance Smart Chain

Language

Solidity

Deployment Date

Dec 31, 2022

Verified?

Yes

Total Supply

100,000,000,000

Status

Not launched

TAXES

Buy Tax
10%

Sell Tax
10%

*Taxes can be changed in future



Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



CURRENT STATS

(As of January 03, 2023)



Liquidity

Not added yet



Burn

No burnt tokens

Status:
Not Launched!

MaxTxAmount
10,000,000,000

DEX
PancakeSwap

LP Address(es)

Liquidity not added yet



TOKEN TRANSFERS STATS

Transfer Count	1
Uniq Senders	1
Uniq Receivers	1
Total Amount	99999999999.99998 ARENA
Median Transfer Amount	99999999999.99998 ARENA
Average Transfer Amount	99999999999.99998 ARENA
First transfer date	2022-12-31
Last transfer date	2022-12-31
Days token transferred	1

SMART CONTRACT STATS

Calls Count	1
External calls	1
Internal calls	0
Transactions count	1
Uniq Callers	1
Days contract called	1
Last transaction time	2022-12-31 18:20:31 UTC
Created	2022-12-31 18:20:31 UTC
Create TX	0xf852bcaa34665a8130cfed10eac7a7f6531f cef2aa8778ccec24ee0b0dcfc3cb
Creator	0x9ed8d866e723d69479a39b146dfed27396 4172f7



FEATURED WALLETS

Owner address	0x9ed8d866e723d69479a39b146dfed273964172f7
Dev wallet	0xE1fecADDE501e359bcfAAF83cB07c56e8E304558
Marketing wallet	0xf795C95a28Ce11B0927ce70A8C804232b7BB283e
LP address	Liquidity not added yet

TOP 3 UNLOCKED WALLETS

1



Same as owner

Tokens are not distributed yet



VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

⚠ High Risk

If `minimumTokensBeforeSwap` is set to 0, contract will halt on selling and sells will become impossible.

```
function setMinimumTokensBeforeSwap(uint256 _minimumTokensBeforeSwap) external onlyOwner() {
    minimumTokensBeforeSwap = _minimumTokensBeforeSwap;
}
function _transfer(address from, address to, uint256 amount) private open(from, to) {
    .....
    bool overMinimumTokenBalance = contractTokenBalance >= minimumTokensBeforeSwap;
    if (!inSwapAndLiquify && swapAndLiquifyEnabled && to == uniswapV2Pair)
    {
        if (overMinimumTokenBalance)
        {
            contractTokenBalance = minimumTokensBeforeSwap;
            swapAndLiquify(contractTokenBalance);
        }
    }
    .....
}
```

- Recommendation:
 - Ensure that `minimumTokensBeforeSwap` variable is always set above 1 token (considering also token's decimals).



FOUND THREATS

⚠ High Risk

- Owner can set buy/sell fees up to 100%, making it impossible to sell.

```
function setTaxFeePercent(uint256 taxFee, uint256 marketingFee,
uint256 devFee, uint256 liquidityFee) external onlyOwner() {
    _taxFee = taxFee;
    _marketingFee = marketingFee;
    _devFee = devFee;
    _liquidityFee = liquidityFee;
}
```

- Owner can set max transaction amount without limitations, making it impossible to sell.

```
function setMaxTxAmount(uint256 maxTxAmount) external onlyOwner() {
    _maxTxAmount = maxTxAmount;
}
```

- Recommendation:
 - Considered as good tax deduction practice is buy and sell fees combined not to exceed 25%.
 - Considered as good transaction limitation practice is max transaction limit to be not lower than 0.1% of total supply.



Informational

Owner can exclude address from fees.

```
function excludeFromFee(address account) public onlyOwner {  
    _isExcludedFromFee[account] = true;  
}
```





RECOMMENDATIONS FOR

GOOD PRACTICES

1

Consider fundamental tradeoffs

2

Be attentive to blockchain properties

3

Ensure careful rollouts

4

Keep contracts simple

5

Stay up to date and track development

ARENA OF FIGHTERS

GOOD PRACTICES FOUND

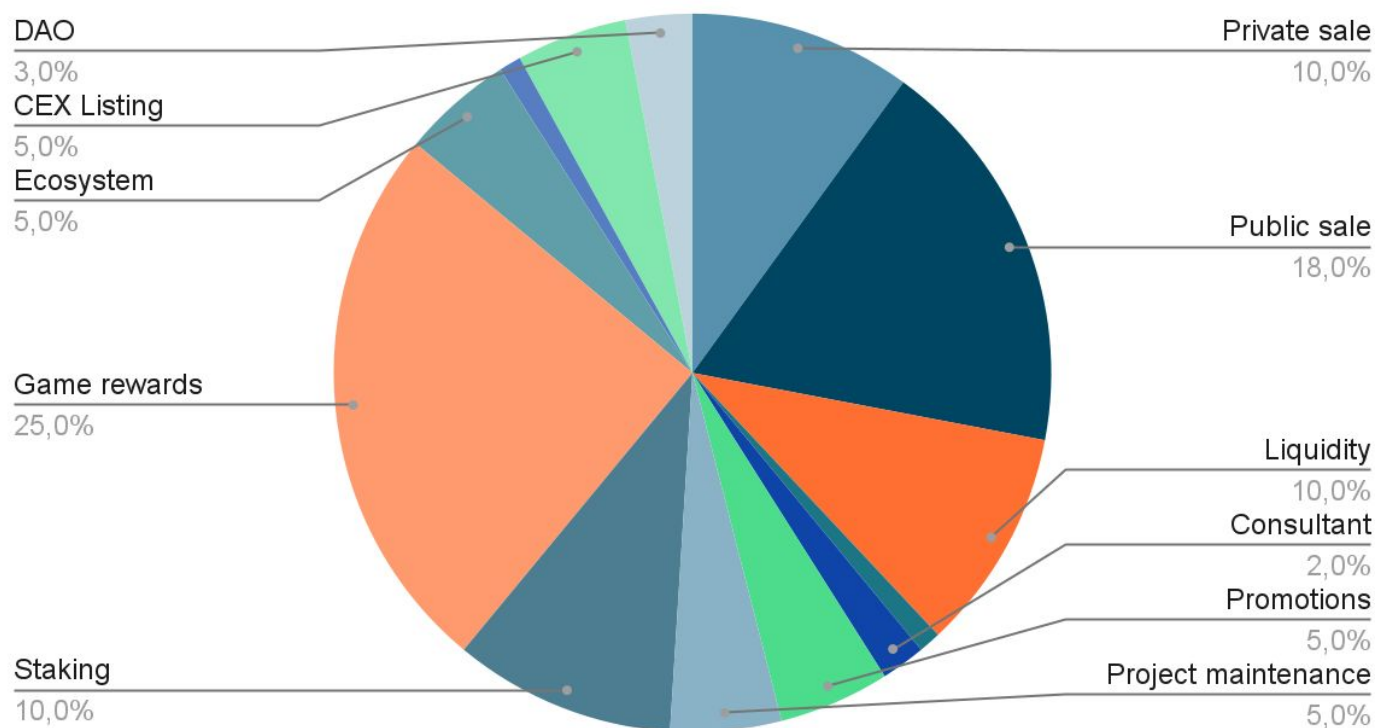
- ✓ The owner cannot mint new tokens after deployment
- ✓ The smart contract utilizes "SafeMath" to prevent overflows



The following tokenomics are based on the project's whitepaper and/or website:

- 10% - Private sale
- 18% - Public sale
- 10% - Liquidity
- 10% - Staking
- 5% - CEX listing
- 5% - Promotions
- 1% - Airdrop
- 25% - Game rewards
- 5% - Ecosystem
- 2% - Consultant
- 3% - DAO
- 1% - Test & Bounty plan
- 5% - Project maintenance

Tokens distribution



TOKENOMICS



THE TEAM

! The team is anonymous

KYC INFORMATION

! No KYC

We recommend the team to get a KYC in order to ensure trust and transparency within the community.





WEBSITE

Website URL

<https://arenaoffighters.com/>

Domain Registry

<https://www.gandi.net>

Domain Expiration

Expires on 2023-12-17

Technical SEO Test

Passed

Security Test

Passed. SSL certificate present

Design

Single page design with nice color scheme and overall layout.

Content

The information helps new investors understand what the product does right away.

No grammar mistakes found.

Whitepaper

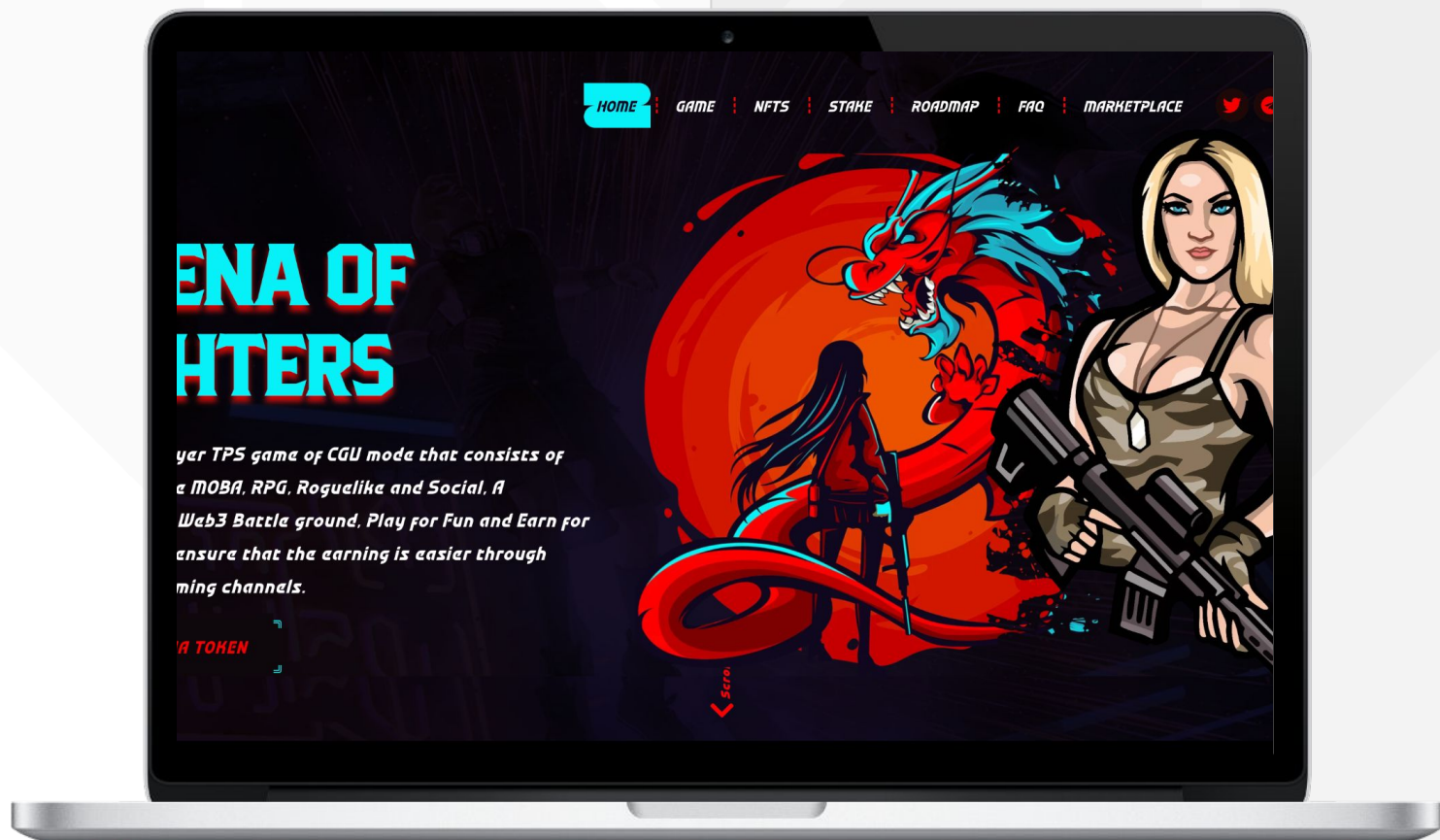
Well written explanatory.

Roadmap

Yes, goals set in 3 phases.

Mobile-friendly?

Yes



arenaoffighters.com

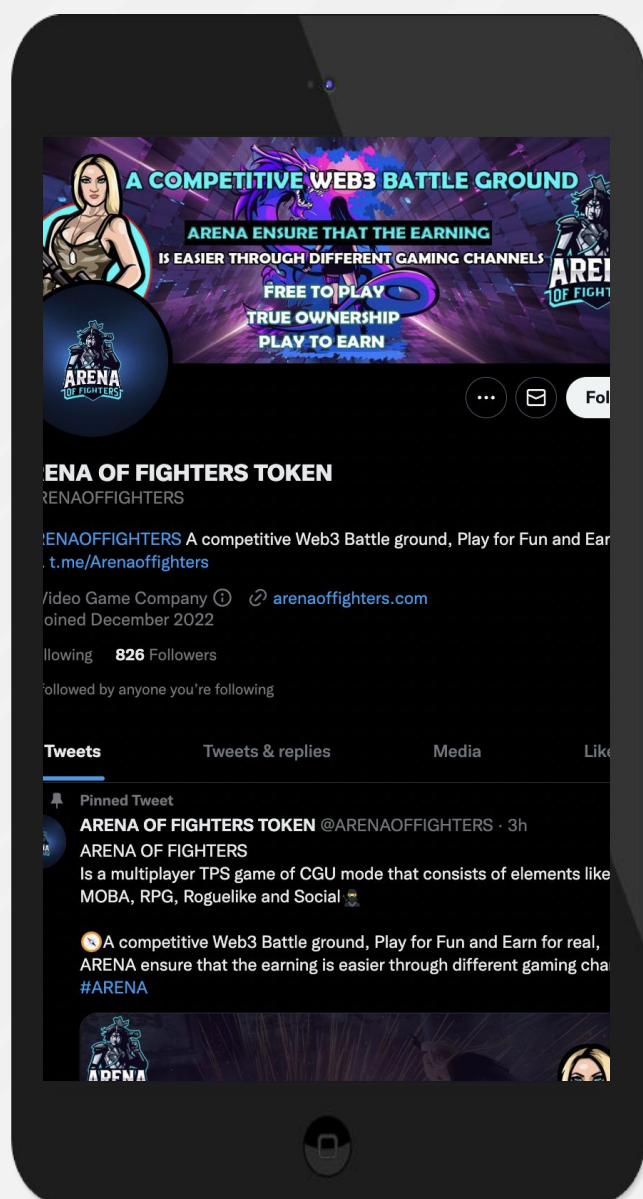


SOCIAL MEDIA & ONLINE PRESENCE



ANALYSIS

Project's social media pages are active



Twitter

@ARENAOFFIGHTERS

- 1 118 followers
- Active
- Daily posts



Discord

- Not available



Telegram

@Arenaooffighters

- 1 411 members
- Few active organic members
- Active mods



Medium

- Not available



SPYWOLF

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Audits | KYCs | dApps
Contract Development

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We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.